

FIG. 1

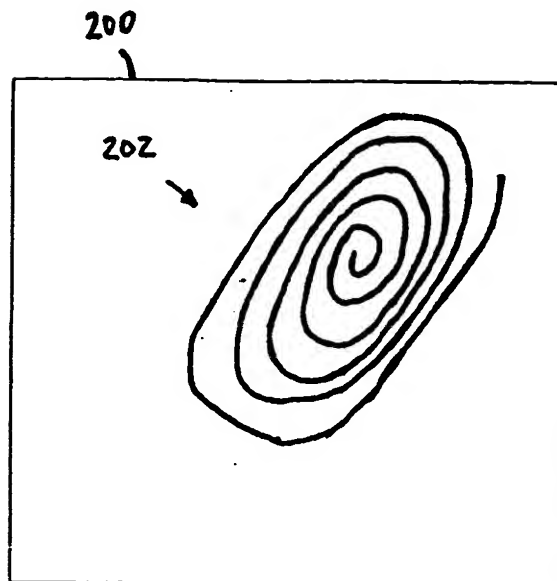


FIG. 2A

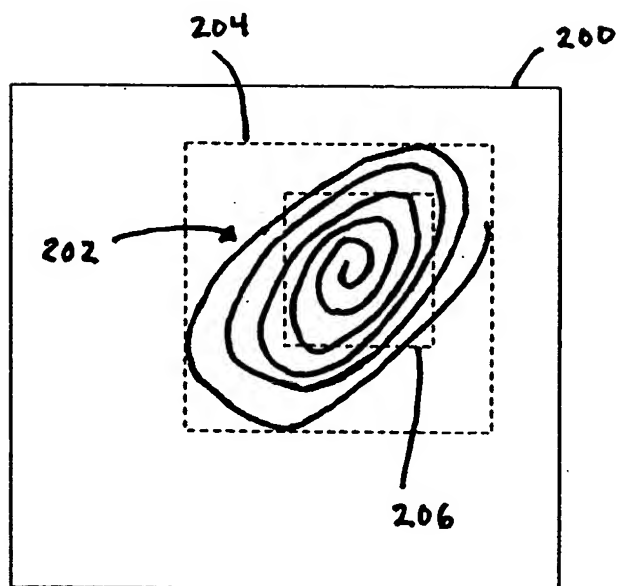


FIG. 2B

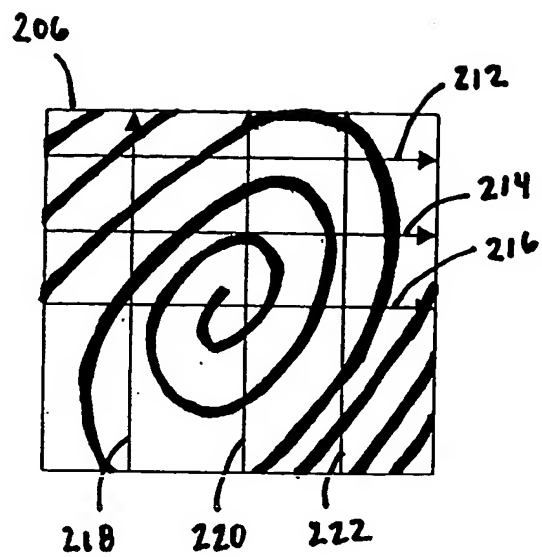


FIG. 2C

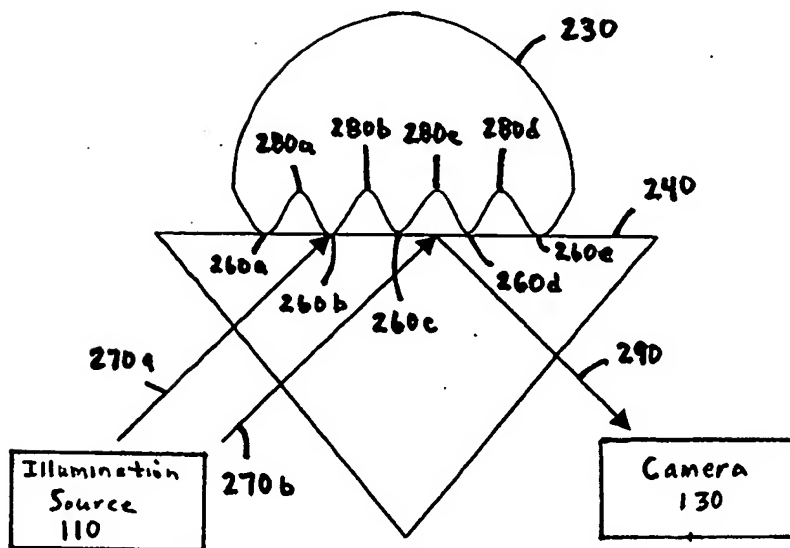


FIG. 2D

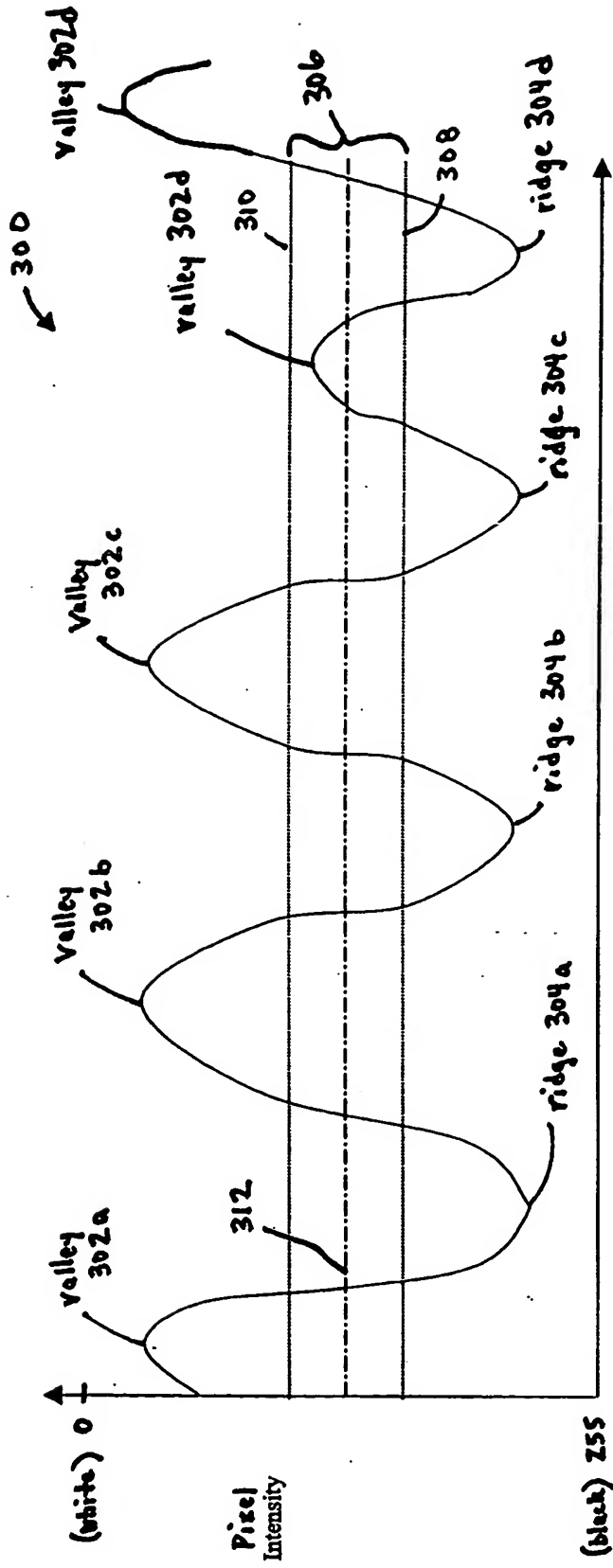


FIG. 3

400 ↗

402

a fingerprint ridge count is determined for one or more pixel paths across a captured fingerprint image frame

404

the determined fingerprint ridge count is evaluated to determine at least a quality of the captured fingerprint image frame

FIG. 4

402

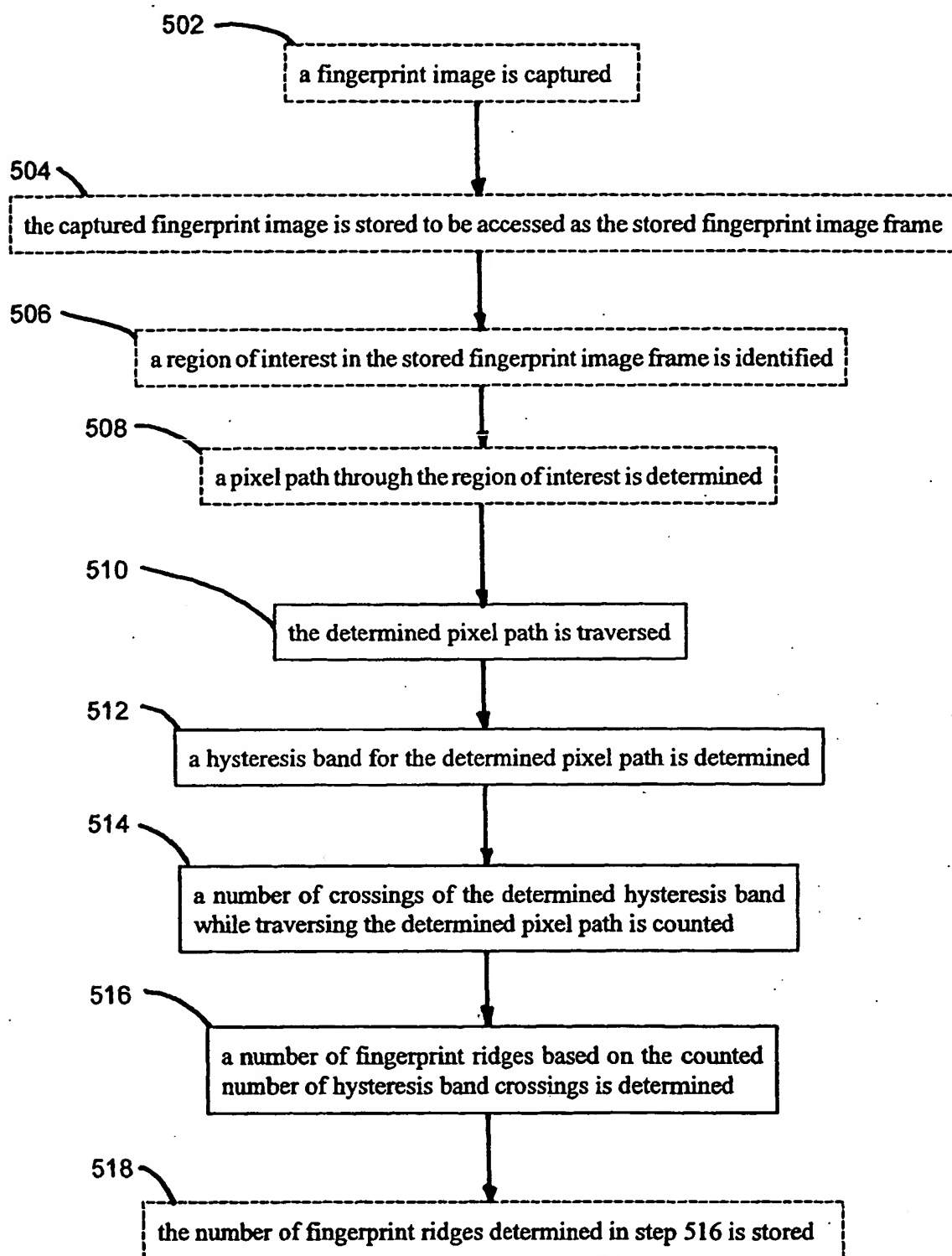


FIG. 5

512

602

a first ridge pixel value peak for the pixel path is measured

604

a first valley pixel value peak for the pixel path is measured

606

a hysteresis band center pixel value is selected between the first ridge pixel value peak and the first valley pixel value peak

608

the hysteresis band first edge value is calculated by adding a delta value to the selected hysteresis band center pixel value

610

the hysteresis band second edge value is calculated by subtracting the delta value from the selected hysteresis band center pixel value

FIG. 6

514

702

a hysteresis band crossing is detected when sequentially detected pixel values range from the hysteresis band first edge value to the hysteresis band second edge value

704

a hysteresis band crossing when sequentially detected pixel values range from the hysteresis band second edge value to the hysteresis band first edge value

FIG. 7

402

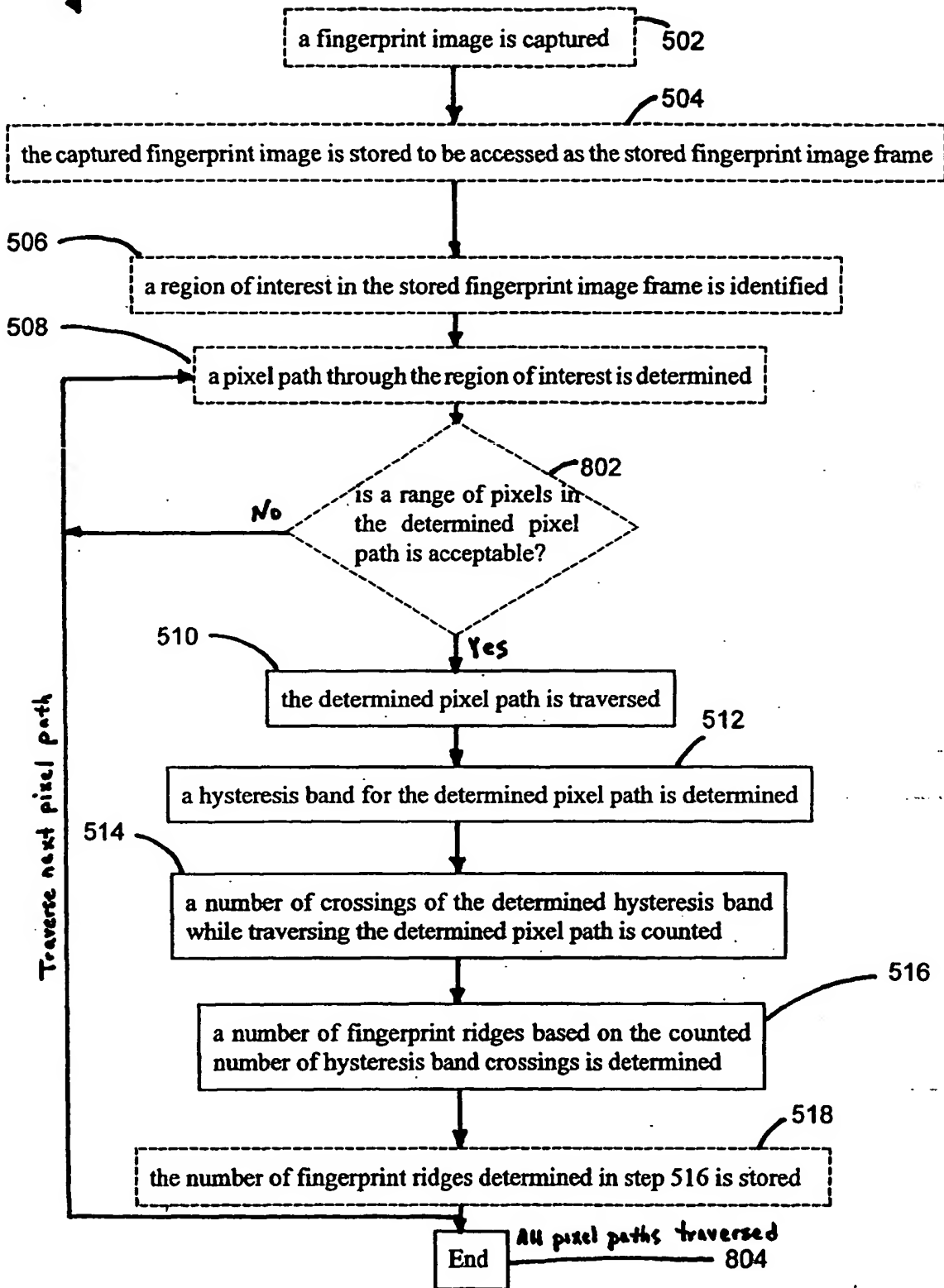


FIG. 8